Second Year- Semester IV

April 24, 2023

Paper 15: Scientometrics and Informetrics

Part A

Answer ALL the questions. 12 X 1 = 12 marks

1. In modern-day research, why is collaboration significant? Select the **best** answer

A. Multi-task research nature and use of statistical tools
B. Interdisciplinary nature of research and use of statistical tools
C. Handling large volumes of data and the heterogeneous nature of disciplines
D. Lack of research time for researchers and handling large volumes of data

2. Among the various ranking systems, the most objective systems are

A. ARWU and QS
B. ARWU and NIRF
C. QS and THE
D. ARWU and CWTS

3. Exporting data from one file to another file/format requires

A. Field Mapping
B. Uniform fields/tags in both source and export file
C. Facility in the database
D. All the above

4. Word analysis and relations are studied in

A. Scientometrics
B. Natural Language Processing
C. Text Analysis
D. All the above

5. The major shortcoming of the citation analysis is

A. Student's papers are not included in the citation analysis
B. Not all journals are included
C. Time-consuming work
D. All the above

6. Unequal distribution is studied in

A. Lotka and Paretto
B. Bradford and De Solla Price
C. Zip'f and De Solla Price
D. All the above

7. The common feature in Bibliometrics, Scientometrics and Informetrics is

A. Quantitative study
B. Data, Scientific Contribution, and variables
C. Textual Analysis
D. All the above

8. Scholarly communication is/has

A. Formal and Informal
B. No clear structure
C. Completely documented
D. High obsolescence

9. The primary application of co-citation analysis is

A. Identifying 'hot' topics
B. Information retrieval
C. Identifying document relations
D. All the above

10. Which of the below statement is most accurate and acceptable?

A. Altmetrics reflects the academic and scholarly impact of scientific publications

B. Altmetrics scores are mostly open metrics
C. There is a strong correlation between altmetrics and the quality of scientific literature
D. Altmetrics includes conventional and new metrics.

11. Which of the following provides selected journals' metrics?
A. Scopus and WoS
B. Wos and Google Scholar
C. Semantic Scholar and Google Scholar
D. All the above

12. Information Growth is measured by

A. Publications and Citations
B. Publications and Information Use
C. Citations and Information Use
D. All the above

PART B **6 X 3 = 18 marks**

Answer any Six of the following

1. Mention a few limitations/shortcomings of the use of citations as a measure
2. Make a brief comparative study of Google scholar and WoS
3. Whether the ranking published by NIRF is acceptable? If it is acceptable or non-acceptable discuss the merits and demerits of it.
4. What is paraphrasing or rephrasing in scientific writing? Is it identifiable?
5. Explain the relations between Information Growth and Obsolescence
6. Briefly discuss the MIT's Open Courseware and NDLI
7. Write a note on Use Metrics such as Downloads, Access/use
8. Write a note on 'Half-life'

Part C **6 X 5 = 30 marks**

Answer any Six of the following.

1. Discuss the role of citations in scientific literature as a tool for evaluation and an aid for information retrieval
2. Discuss the issues in open content metrics
3. What are the benefits of research collaboration? How the research collaboration is initiated?
4. What are the features and functions of the scientometric tools/packages?
5. Discuss some of the major citation-based (specific) indicators.

6. Which ranking system (of universities) is mostly acceptable? (in your own perception). Please explain the reasoning behind your views.
7. List some major Altmetric indicators and briefly describe them. Which are the most-acceptable indicators for research evaluation
8. Discuss the inequality and skewness in science.

==========END==========